

# **Template**



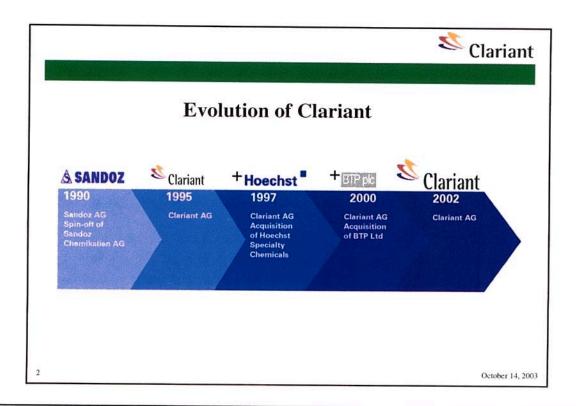


#### Clariant

Clariant Corporation is a U.S. affiliate of Clariant Ltd., a Swiss-based global specialty chemical company, which manufactures and markets a wide range of specialty and fine chemicals for the pharmaceutical, agrochemical, electronic, plastics, paints and coatings, textile, paper, leather, metal, household and personal care products and chemical processing industries.

20-30 US sites

October 14, 2003







## **Meeting Goals**

Begin dialogue with EPA and share information including:

- Clariant Pigment Red 144 and Pigment Red 214 (Red 144/214) manufacturing process at Coventry
- Discovery of PCB contamination in Red 144/214
- Response actions taken to date
- Issues that need to be addressed regarding further actions

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## **Pigment Production**

- Pigments based on di- and trichloroanilines have the potential to inadvatently generate PCBs
- Recognized by EPA in TSCA PCB rulemaking See 48 FR 50486 (1983) Manual Matuto
- Excluded manufacturing process filing covers manufacture of di- and trichloroaniline based pigments
- The Red 144/214 processes are part of the notification under 40 CFR 761.185(a) to EPA made by American Hoechst Corporation (now part of Clariant) in 1985

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### Clariant Red 144/214 Pigment Manufacture

- These pigments have been made by Clariant at sites outside the United States for 10 years Busin Aux. 2001 214
- CONFIDENTIAL BUSINESS INFORMATION
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## Clariant Red 144/214 Pigment Manufacture Pre-Manufacture Activities

- Review of production processes used in Europe
- Lab scale production
- Intermediate and lab produced product testing
- Amounts of PCB in intermediate matched amounts of PCB in the finished product
- Conclusion that PCB generation potential is found in the diazotization stage and not the condensation reaction
- Therefore, testing of intermediate appeared to be appropriate control

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# Clariant Red 144/214 Pigment Manufacture Basic Process

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# Clariant Red 144/214 Pigment Manufacture Historical Data

- Batch process used to create commercial lots of pigments based on color properties
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# Pigments and Additives Division Global Quality Initiative

- Program designed to globally coordinate QC and analytical data on products
- Protocol considered international guidelines, (EU, USA, Japan, France, Austria, Australia, Germany, etc)
- Prioritized international products and newly made or introduced products
- Protocol matrix may include metals, primary aromatic amines, aromatic amino sulfonic acid, polychlorinated biphenyls (PCB)
- Red 144/214 testing completed in September 2003

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# Clariant Red 144/214 Pigment Analytical Results

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## **Initial Responses**

- Production of Red 144/214 stopped and material quarantined
- Occupational health and exposure assessment experts retained and employees informed of results
- Confirmatory sampling and sampling of historical batch retains
- Customers notified and informed of our engagement of Clean Harbors to retrieve product for disposal
- Regulatory notifications EPA and RIDEM

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## **Regulatory Notifications**

#### **EPA Reporting**

- Clariant made self-report under audit privilege.
- Initial notification made to Tony Ellis of OECA at EPA Headquarters.
- Matter referred to Geraldine Gardner who was contacted by telephone and with a follow-up letter. After internal EPA consultations, Ms. Gardner recommended that Region 1 would take the lead on this issue to coordinate EPA response.
- Contacted Ms. Deborah Brown and sent copies of prior correspondence with EPA.
- Program questions referred to Peggy Reynolds, also at Headquarters.

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## **Regulatory Notifications (cont.)**

#### **RIDEM Reporting**

- No mandatory reporting was determined to apply to RIDEM.
- Self-report made for informational purposes to Mr. Jan Reitsma, Director of RIDEM.
- Follow-up letter sent to Mr. Reitsma.

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#### **Evaluation of Production Process Issues**

Process Development Lab proceeding on 3 paths after we identify source of PCB formation:

- Eliminate by-product that forms free radicals to stop PCB formation, or
- Add free-radical scavenger to stop free radical formation from by-product, or
- Minimize PCB formation, prevent PCBs from remaining in product, concentrate in still bottoms
  - This process is being evaluated for product recovery as well

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## **Regulatory Issues and Open Questions**

- Possibility of reprocessing off-spec material
  - 40 CFR 761.60(e)
  - Procedure to obtain EPA approval to reprocess contaminated pigment
  - PCBs will be concentrated in solvent still bottoms and incinerated
- Transport of inventory at Clariant Mexico back to Coventry site for either reprocessing/disposal (40 CFR 761 subpart F)

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# SARA 313 Reporting

- Coventry Site has submitted Form R's for PCB releases for 2000,2001,2002.
- There was not a 313 report for previous years due to de minimis concentrations
- All reported releases were for off-site transfers, based on conservative estimates, not analytical
- 2000-0.66 pounds
- **2001-0.82** pounds
- **2002-0.29** pounds
- Review need for filing amendments